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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/720,445 | 11/25/2003 | Masayuki Ishizaki | 1075.1238 | 4545 |

21171 7590 12/21/2009

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| EXAMINER | |
|---|---|
| ZHONG, JUN FEI | |
| **ART UNIT** | **PAPER NUMBER** |
| 2426 | |
| **MAIL DATE** | **DELIVERY MODE** |
| 12/21/2009 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/720,445 | ISHIZAKI, MASAYUKI | |
| | Examiner | Art Unit | |
| | JUN FEI ZHONG | 2426 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *09 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

1. This Office Action is in response to an AMENDMENT entered 10/9/2009.

2. The Non-Final Office Action of 7/14/2009 is fully incorporated into this Final Office Action by reference.

### *Status of Claims*

3. Claims 1-17 are pending.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-4, 13, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner et al. (patent # US 5956716) in view of Oishi (Pub # US 2002/0118608).

As to claim 1, Kenner discloses a digital broadcast distribution signal distribution system (Fig. 1 and 4) comprising:

two or more distribution centers (e.g., index managers ("IM") 64, 88, 90; Fig. 4), communicably connected to one another through a communication line (e.g., high speed dedicated line 96; Fig. 4), each of said distribution centers for distributing a digital

broadcast distribution signal, which has been created based on program information received in each said distribution center, to subscribers through a network, and for sending the digital broadcast distribution signal to another of said distribution centers and for receiving a digital broadcast distribution signal from another of said distribution centers (see col. 7, line 14-col. 8, line 50; col. 20, line 10-col. 21, line 16; col. 26, line 26-col. 27, line 22);

subscriber terminals (e.g., user terminal 14; Fig. 1), each for receiving a third digital broadcast distribution signal distributed from one of the distribution centers through the network so that a subscriber views a program (e.g., receiving remote DSI 42 information) (see col. 8, lines 15-50; col. 12, lines 14-55),

each said distribution center (e.g., index managers ("IM") 22; Fig. 1) including a signal replacement section (e.g., creating DSI 30; Fig. 1) for replacing a first digital broadcast distribution signal created based on the program information received in each said distribution center with a second digital broadcast distribution signal, which each said distribution center received from another of said distribution centers (see col. 12, line 4-col. 13, line 9; col. 25, lines 13-36; Fig. 1 and 4),

Kenner discloses the user terminal is a television set top box. Kenner also discloses the remote DSI 42 for directing communication to other server when the local server is busy (not available) (see col. 12, lines 15-55).

However, Kenner fails to specifically disclose the network is a CATV network and subscriber terminals including a distribution plan storage, a distribution center

discriminating section, a receiving section. It is well known in the television art that a set top box been used in the CATV network.

Oishi discloses a CATV (Community Antenna Television) network (e.g., CATV network 4, 24; Fig. 1, 2) (see paragraph 0007, 0083).

subscriber terminals (e.g., reception system 25; Fig. 2) including

a distribution plan storage (e.g., EEPROM 76; Fig. 15) for retaining channel distribution plans, one representing distribution setting information including at least a service ID (Fig. 8) and network information table (NIT) information (Fig. 6) of the first digital broadcast distribution signal of each said distribution center (see paragraph 0075-0077, 0081-0084, 0142, 0151, 0154-0155) (Kenner also discloses the DSI may reside in user terminal; see Kenner col. 12, lines 5-14),

a distribution center discriminating section (e.g., IC card 32; Fig. 2, 15) for discriminating the one distribution center that has created the third digital broadcast distribution signal, which is received in each said subscriber terminal (see paragraph 0055, 0137-0138),

a receiving section (e.g., front end portion 60; Fig. 15), if the third digital broadcast distribution signal including the service ID of the program designated by the subscriber is discriminated to be transmitted from a local distribution center, which is located in a local area in which each said subscriber terminal is located and which is one of said distribution centers, using the NIT information associated with the third digital broadcast distribution signal including the service

ID of the program designated by the subscriber in a first channel distribution plan which is one of the channel distribution plans of the local distribution center to receive the third digital broadcast distribution signal (i.e., the NIT not change, using the stored NIT to receive signal), and if the third digital broadcast distribution signal is discriminated to be transmitted from a different one of the distribution centers from the local distribution center, replacing the NIT information associated with the third digital broadcast distribution signal including the service ID of the program designated by the subscriber in the first channel distribution plan with the NIT information associated with the third digital broadcast distribution signal including the service ID of the program designated by the subscriber in a second channel distribution plan which is one of the channel distribution plans of the different distribution center of the distribution centers from the local distribution center to receive the third digital broadcast distribution signal (i.e., when the NIT renewed, replaces with the new NIT and stores in EEPROM 76) (see paragraph 0145-0169; Fig. 16, 17),

wherein said subscriber terminals are provided each in one of subscriber homes (see paragraph 0088).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have subscriber terminal as taught by Oishi to the video delivery system of Kenner in order to enable a redistributing source itself to easily control use of services to be supplied to viewers in a redistributing system of digital satellite broadcasts (see paragraph 0013).

As to claim 2, Kenner discloses a digital broadcast signal distribution system according to claim 1, further comprising a local station (e.g., local SRU 18), communicably connected to one of said distribution centers, for sending the third-digital broadcast distribution signal from a last one distribution center to subscribers downstream of said local station without changing at least PSI/SI (Program Specific Information/Service Information) of the third digital broadcast distribution signal (see col. 8, line 50-col. 10, line 9; Fig. 1).

Oishi discloses PSI/SI information (see paragraph 0059).

As to claim 3, Kenner discloses a digital broadcast signal distribution system according to claim 1, wherein said signal replacement section in each said distribution center replaces the first digital broadcast distribution signal with the second digital broadcast distribution signal in accordance with a reception state of the first digital broadcast distribution signal at each said distribution center (see col. 26, lines 26-67).

As to claim 4, it contains the limitations of claim 3 and is analyzed as previously discussed with respect to claim 3 above.

As to claim 13, Kenner discloses a digital broadcast signal distribution system according to claim 1, further comprising a repeater (e.g., local SRU 18) for relaying the

third digital broadcast distribution signal in the CATV network (see col. 8, line 50-col. 10, line 9; Fig. 1).

As to claim 15, Kenner discloses a digital broadcast signal distribution system according to claim 1, wherein the first digital broadcast distribution signal and the second-named digital broadcast distribution signal of each said distribution center are sent and received through the communication line via Internet Protocol (IP) (see col. 20, lines 10-34; Fig. 4).

As to claim 17, Oishi discloses digital broadcast signal distribution system according to claim 1, wherein each said subscriber terminal further includes a distribution plan obtaining section (e.g., controller 80; Fig. 15) for obtaining the channel distribution plans that are to be stored in said distribution plan storage (see paragraph 0126-0132).

6. Claims 5-12, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner et al. in view of Oishi, and further in view of Medin (Pub # US 2004/0205339).

As to claim 5, note the discussion above, Oishi discloses a CATV (Community Antenna Television) network (e.g., CATV network 4, 24; Fig. 1, 2) (see paragraph 0007, 0083);

Kenner discloses a Fiber Distributed Data Interface (FDDI) which is inherently using optical fiber as the communication medium (see col. 17, lines 47-63).

Neither Kenner nor Oishi specifically disclose the CATV network includes an optical fiber.

Medin discloses CATV network includes an optical fiber (see Abstract, paragraph 0011, 0033, 0036; Fig. 1);

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have fiber optics as taught by Medin to the video delivery system of Kenner as modified by Oishi in order to provide network architecture and operation is scalable to larger size and/or higher speeds, and delivering high-performance online multimedia services (see paragraph 0010-0011).

As to claim 9, Medin discloses analog transmission is performed on the third broadcast distribution signal while being distributed to each said subscriber terminal in the CATV network (see paragraph 0051, 0054-0055, 0059).

As to claims 6-8 and 10-12, they contain the limitations of claims 5, 9 and are analyzed as previously discussed with respect to claims 5, 9 above.

As to claim 14, Medin discloses communication line that communicably connects said distribution centers is a ring network (see paragraph 0031-0033; Fig. 1).

As to claim 16, Medin discloses signal is distributed to each said subscriber terminal by using IP multicast (see paragraph 0067, 0105, 0106).

***Response to Arguments***

7. Applicant's arguments filed 10/9/2009 have been fully considered but they are not persuasive.

As to claim 1, applicant argues that Oishi shows no "subscriber terminals are provided each in one of subscriber homes," as recited.

However, the examiner respectfully disagrees. Oishi discloses the receiver 31 (subscriber terminal) is located in viewer's house (see paragraph 0088).

Applicant further argues that the front-end portion 60 of Oishi is not "receiving section" as claimed.

The examiner respectfully disagrees. Oishi discloses the front-end portion 60 is under the control of the controller 80. And the controller 80 monitors the NIT from the incoming channel. If the NIT is not changed, use the stored NIT information to demultiplex/decode the signal; if the NIT is changed, use the renewed NIT information to demultiplex/decode the signal (i.e., the NIT information includes service ID, network ID and other information to identify the signal stream) (see paragraph 0128-0131, 0153-0155).

The examiner interpreted the limitation "replacing the NIT information" as the receiver updated the NIT information in the EEPROM (when the NIT version number changed). Oishi discloses the NIT version number changes when the satellite delivery

system descriptor changes to a cable delivery system descriptor (distribution center changes) (see paragraph 0094, 0155).

Therefore, the combination of Kenner and Oishi disclose the claimed limitation.

As to claims 2-17, they are rejected at least for the reason above. Inter alia, the rejection under 35 U.S.C. 103 remains.

***Conclusion***

8. Claims 1-17 are rejected.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Suzuki et al. (Patent # US 5864358)

***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUN FEI ZHONG whose telephone number is (571)270-1708. The examiner can normally be reached on M-F, 7:30~5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hirl can be reached on 571-272-3685. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JFZ
12/16/2009

/Joseph P. Hirl/
Supervisory Patent Examiner, Art Unit 2426
December 17, 2009